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NOTEWORTHY COLLECTION

WASHINGTON

CALOCHORTUS NITIDUS Douglas (LILIACEAE). — Whitman County, Steptoe Butte, remnant native Palouse prairie grassland on north-facing slope, vicinity of 47.033469°, –117.306148°, 860–880 m, *Riser 392* and *Riser 393*, 19 July 2016 (WS). Over 100 individual plants found in small rills and gullies at base of north-facing slope. Associated species include: *Achillea millefolium* L., *Berberis repens* Lindl., *Festuca idahoensis* Elmer, *Gaillardia aristata* Pursh, *Geranium viscosissimum* Fisch. & C.A.Mey. ex C.A.Mey., *Geum triflorum* Pursh, *Hieracium scouleri* Hook. var. *albertinum* (Farr) G.W.Douglas & G.A.Allen, *Iris missouriensis* Nutt.,, *Pseudoroegneria spicata* (Pursh) Á.Löve, and *Symphoricarpos albus* (L.) S.F.Blake.

Previous knowledge. *Calochortus nitidus* is known in Washington from a small number of early collections from eastern Whitman County. The last unequivocal documented collection of *C. nitidus* from Washington is the *Park s.n.* collection in 1923. A 1938 collection by Marion Ownbey (*Ownbey 1855*) has conflicting locality information: "4 miles east of Tekoa", which places it across the state line in Idaho. It was likely collected in Idaho and mislabeled as being from Washington. Outside Washington, *C. nitidus* is found at numerous sites in Idaho, occurring in various grassland vegetation associations in Benewah, Clearwater, Idaho, Latah, Lewis, and Nez Perce Counties.

Significance. The last sighting of this species in Washington was during a 1995 vegetation survey in nearby Asotin County on the Umatilla National Forest in the Lick Creek drainage (T9N, R43E, Sec 15). At this time, a specimen was collected by Karl Urban and sent to Douglass Henderson at the University of Idaho Stillinger Herbarium (ID) for identification. Efforts to find this specimen and any associated correspondence have been unsuccessful, and it appears to have never been incorporated into the herbarium collections and is likely lost. However, a color photograph taken by Karl Urban at that time shows that this is clearly *C. nitidus*. Subsequent surveys have failed to relocate plants at this occurrence (M. Darrach, University of Washington Herbarium, personal communication). This new 2016 population represents the first documented occurrence of *C. nitidus* in Washington since 1995 and the first occurrence in Whitman County since 1923.

Most of the early Whitman County records lack detailed locality information or habitat descriptions. However, when these data are present they indicate an affinity for lower-lying areas: "Bottom land." (*Hunter s.n.*, 1899), "Dry field." (*Park s.n.*, 1923), "Border of wet meadow." (*Suksdorf s.n.*, 1916), "In flats." (*Pickett 553*, 1916), "In low ground." (*Piper s.n.*, 1894), "Dried swales." (*Henderson 2484*, 1892), "In low bottoms." (*Lake 618*, 1892). *Calochortus nitidus* was likely never particularly common in Washington and was presumed extirpated from the state when these areas were extensively converted to agriculture in the early 20th century. In fact, Ownbey (1969) stated "...*C. nitidus* grows in potential farm land. As a consequence, it has become one of the rarest of our species of *Calochortus*. In the last 25 years, perhaps half of its known populations – none very large – have been destroyed." As far as can be determined from available specimen label data, no *C. nitidus* occurrences from Washington are known from upland habitats. However, in Idaho *C. nitidus* is more commonly found growing in upland grassland habitats (e.g., the populations south of Grangeville occurring on the ridges above the Salmon River). In Latah County (Idaho), near the Washington-Idaho state line, *C. nitidus* was historically recorded from both low-lying ["Low meadow" (*Ownbey 1854*, 1938), "Lowlands in fescue-wheatgrass prairie" (*Daubenmire 38264*, 1938)] as well as upland habitats, such as the slopes of Tomar Butte (e.g., *Baker 14418*, *14480*, *14484*, all 1956). It was likely extirpated from these low-lying sites when they were converted to cropland and is now infrequently found in upland native Palouse prairie grassland remnants that were too rocky for agriculture and thus preserved.

During the course of additional survey work, a second Washington population of *C. nitidus* was subsequently found on 28 July 2016 by J. Riser on private land northeast of Oaksdale; however, detailed locality information is being withheld to protect the landowner's privacy. It is likely there are additional populations in Whitman County, but the lack of access to private lands will continue to hinder survey efforts.

—JAMES P. RISER II, Palouse Conservation District, 1615 NE Eastgate Blvd., Suite H, Pullman, WA 99163; jriserii@gmail.com.

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LITERATURE CITED

OWNBEY, M. 1969. *Calochortus*. Pp. 765–779 *in* C. L. Hitchcock, A. Cronquist, M. Ownbey, and J. W. Thompson (eds.) Vascular plants of the Pacific Northwest. Part 1: vascular cryptograms, gymnosperms, and monocotyledons. University of Washington Press, Seattle, WA.